# IN THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF DELAWARE

INFINEON TECHNOLOGIES AG, INFINEON TECHNOLOGIES AUSTRIA AG, and INFINEON TECHNOLOGIES NORTH AMERICA CORPORATION,

Plaintiffs,

v. : Civ. No. 08-887-SLR-LPS

:

FAIRCHILD SEMICONDUCTOR INTERNATIONAL, INC., and FAIRCHILD SEMICONDUCTOR CORPORATION,

:

Defendants.

## MEMORANDUM ORDER

Pending before the Court is a Motion for Leave to File Amended Complaint filed by plaintiffs, Infineon Technologies AG ("Infineon AG"), Infineon Technologies Austria AG ("Infineon Austria AG"), and Infineon Technologies North America Corp. ("Infineon NA") (collectively, "Infineon"), on March 4, 2009 (docket number ("D.I.") 17 or "Motion to Amend"). For the reasons that follow, I grant Infineon's Motion to Amend.

## I. Background

Infineon brings this patent infringement suit against Fairchild Semiconductor

International, Inc. and Fairchild Semiconductor Corp. (collectively, "Fairchild"), who, like

Infineon, are engaged in the semiconductor business. The Fairchild entities are Delaware

corporations having their principal places of business in South Portland, Maine. Infineon NA is

also a Delaware corporation, having its principal place of business in California. Infineon

Austria AG and Infineon AG are Austrian and German companies, respectively, each with its principal place of business in its home country.

#### A. The Delaware Action

Infineon and Fairchild began negotiations regarding their numerous, respective patent holdings in the field of semiconductor technology in 2005. (D.I. 17 at 3) On November 25, 2008, Infineon filed a complaint in the District of Delaware alleging infringement of five of its patents and for declaratory judgments of noninfringement and invalidity of six of Fairchild's patents (hereinafter the "Delaware Action" or the "Delaware Complaint"). (D.I. 1) All eleven of the patents being litigated in the Delaware Action (the "Delaware Patents") relate to the class of semiconductor transistors called power MOSFETs. (D.I. 17 at 4; D.I. 22 at 9-10) As Fairchild's expert notes (without dispute from Infineon), power MOSFETs are a principal element of the power supplies of many electronic devices, such as televisions, mobile phones, and personal computers, and may also be used in industrial applications. (D.I. 22 at 3) Power MOSFETs can perform interrelated but separate roles in these products, such that the design of a particular power MOSFET necessarily depends on its intended application, giving rise to the large number of patents in the field of power MOSFETs. (D.I. 22 at 3)

Fairchild answered the Delaware Complaint on November 28, 2008 and raised counterclaims for infringement and declaratory judgments regarding the eleven patents asserted in the Delaware Action. (D.I. 9, 10)

## B. The Maine Action

On the same day that it filed an answer in the Delaware Action, Fairchild filed suit in the District of Maine against two of the Infineon entities for infringement of two of Fairchild's other patents (hereinafter the "Maine Action" or "Maine Complaint"), the '481 and the '943 patents (the "Maine Patents"), neither of which were referenced in Infineon's Delaware Complaint nor in

Fairchild's defenses and counterclaims to the Delaware Complaint. (D.I. 21 at 5) On December 3, 2008, Fairchild served Infineon NA with the Maine Complaint, which Infineon NA answered on January 22, 2009. (D.I. 21 at 6) The second Infineon entity, Infineon Germany, acknowledged service on June 18, 2009. *Fairchild Semiconductor Corp v. Infineon Tech. AG*, 2:08-cv00411(DBH), Docket No. 23 (D. Me.).

The '481 patent concerns "the formation of an 'abrupt junction' between the heavy body and the well region of the cells in the active region of a power MOSFET so that the initiation point of avalanche breakdown is moved away from the trench of the device." (D.I. 22 at 10) The '943 patent concerns "a method of forming a power MOSFET which addresses the problem of alignment of microscopic features during the fabrication process." (D.I. 22 at 10)

# C. Infineon's Motion to Amend the Delaware Complaint

On March 4, 2009, approximately three months after Fairchild commenced the Maine Action, Infineon moved in this Court to amend its Delaware Complaint to include claims for declaratory judgments of noninfringement and invalidity of Fairchild's '481 and '943 patents.

(D.I. 17) Briefing on Infineon's Motion to Amend was essentially completed on April 2, 2009

(D.I. 29), but the parties submitted follow-up letters regarding the status of the Maine Action on September 11 and 13, 2009. (D.I. 67, 68)

# II. The Parties' Positions Prior To The August 28 Order

#### A. Infineon's Position

Pursuant to the "liberal policy" of Rule 15(a) of the Federal Rules of Civil Procedure, Infineon argues that adding the '481 and '943 patents to the Delaware action "makes good sense" and will not unduly prejudice Fairchild, because the Maine Patents involve the same dispute over power transistors that is currently being litigated in the Delaware Action. (D.I. 17 at 6, 9) Specifically, the '481 and '943 patents teach aspects of power MOSFET technology, which is the

same technology at the core of the eleven patents-in-suit in the Delaware Action. (D.I. 17 at 11-12) Infineon also maintains that the Maine Complaint accuses the same Infineon products already involved in the Delaware Action. Thus, according to Infineon, "(1) the same field of power transistor art, (2) the same fundamental power transistor science and technology, (3) the same accused power transistor products, and (4) the same pricing, sales, and related market data" will be central to both cases. (D.I. 17 at 6) Allowing Infineon's proposed amendments would thus prevent duplicate (and possibly inconsistent) litigation, expedite discovery and claim construction, and capitalize on the fact that a Delaware jury is already slated to be educated in power MOSFET technology to resolve the Delaware Action. (D.I. 29 at 2, 12-16)

Infineon further contends that adding the Maine Patents to the Delaware Complaint satisfies the "first-to-file" rule, pursuant to which, Infineon claims, this District should be considered the first-filed forum even with respect to the unasserted Maine Patents. (D.I. 17 at 8) Infineon emphasizes that Fairchild has accused the same Infineon OptiMOS3 products of infringement in both actions, and that both the Maine and Delaware Patents are directed to the "same specific product: MOSFETs." (D.I. 29 at 12) Additionally, the Maine and Delaware Patents involve the same key structural elements of power MOSFETs: trenches, terminals, and doped regions to create terminals. (D.I. 29 at 13-14) The Maine and Delaware Patents are also concerned with the same technical problems. For example, the '943 Maine patent, '026 Delaware patent, '878 Delaware patent, and '691 Delaware patent all address the goal of achieving "low Rds<sub>on</sub> resistance." (D.I. 29 at 15-16) Likewise, the '481 Maine patent, the '026 Delaware patent, the '878 Delaware patent, and the '588 Delaware patent all involve attempts to improve "avalanche breakdown" or "breakdown voltage." (D.I. 29 at 15-16) Because the Maine and Delaware Patents present the same factual issues, Infineon insists that its Delaware Action is the first action to be filed relating to the Maine Patents. (D.I. 29 at 6-8)

Infineon also addresses Fairchild's request that this Court require Infineon to move (in Maine) to transfer the Maine Action to this Court before allowing Infineon to add the Maine Patents to its Delaware Complaint. Infineon replies that no procedural bar prevented it from moving to amend its Delaware Complaint prior to moving to transfer the Maine Action.

Moreover, Infineon has challenged the District of Maine's personal jurisdiction over it by filing a motion to dismiss based on lack of personal jurisdiction and the first-to-file rule. (D.I. 29 at 3-4, 6-7) Thus, Infineon urges, allowing amendment of the Delaware Complaint will "save the Maine court from having to decide jurisdictional motions and will effectuate . . . the 'first-filed' rule." (Id. at 8)

#### B. Fairchild's Position

Fairchild's opposition to Infineon's Motion to Amend the Delaware Complaint is based primarily on two arguments. First, Fairchild suggests that Infineon's filing of its Motion to Amend the Delaware Complaint before moving to transfer the Maine Action was a bad faith "attempt to circumvent" the Maine District Court's jurisdiction over disputes relating to the Maine Patents. (D.I. 21 at 2-3, 9-10) Fairchild notes that even if this Court grants Infineon's Motion to Amend, litigation in Maine will continue because Infineon will still have to move there to stay, dismiss, or transfer that case. (D.I. 21 at 11) Thus, Fairchild requests that this Court require Infineon first move in Maine to stay, dismiss, or transfer the Maine Action, and only thereafter rule on the merits of Infineon's Motion to Amend.

Second, Fairchild asserts that permitting Infineon to add the Maine Patents to the

Delaware Action will unfairly prejudice Fairchild because the issues arising from the Maine

Patents are not the same as the issues presented in the Delaware Action. Therefore, adding these

<sup>&</sup>lt;sup>1</sup>As of the date Fairchild filed its opposition to Infineon's Motion to Amend, Infineon had not challenged the propriety of the District of Maine as a venue for adjudicating Fairchild's '481 and '943 patent claims. (D.I. 21 at 9)

patents to the Delaware Action would unduly prejudice Fairchild by depriving it of "its most convenient and preferred forum" for the separate issues relating to the Maine Patents. (D.I. 21 at 3)

Relying on the affidavit of its expert (D.I. 22), Fairchild denies that the two cases present identical "technical, claim construction, and infringement issues," making it improper to construe the Delaware Action as the first-filed case. (D.I. 21 at 14) The Maine and Delaware Patents have "dissimilar" subject matter, no inventors in common, and will involve "different" technical, claim construction, and infringement issues. (D.I. 21 at 14) Therefore, to Fairchild, the Maine Action should be considered the first-filed case because, with respect to the Maine Patents, Maine was the first District in which those particular patents were asserted. (D.I. 21 at 12) In Fairchild's view, then, this Court would be violating the first-to-file rule by permitting Infineon to add the Maine Patents to its Delaware Complaint, because that amendment would create litigation in this Court duplicative of the Maine Action, which would defeat the purpose of the rule. (D.I. 21 at 12) Fairchild also observes that the Delaware Action presently encompasses eleven separate patents, and to add "two more patents, which involve a whole set of new and different issues," would unnecessarily compound the already-complex issues at hand. (D.I. 21 at 3)

#### III. The August 28 Order

The Maine Action has progressed since the briefing on Infineon's Motion to Amend closed. On June 25, 2009, Infineon moved in Maine to dismiss the Maine Action for lack of personal jurisdiction or, in the alternative, to transfer the Maine Action to this Court. *See Fairchild Semiconductor Corp v. Infineon Tech. AG*, 2:08-cv00411(DBH), Docket No. 25 (D. Me.). On August 28, 2009, after oral argument, District Judge D. Brock Hornby issued an oral order denying Infineon's motion to dismiss without prejudice, with permission to renew after

limited jurisdictional discovery takes place. Transcript of Oral Argument at 43, Docket No. 42 (D. Me.) (hereinafter "Transcript of Oral Argument"). Judge Hornby also denied Infineon's motion to transfer without prejudice, with permission to renew after this Court rules on Infineon's Motion to Amend the Delaware Complaint. (*Id.*) The Maine District Court is "awaiting" this Court's decision as to whether the Maine Patents should be part of the Delaware Action. (*Id.* at 44.)

The August 28, 2009 Order has rendered moot Fairchild's request that Infineon be required to move to transfer the Maine Action to Delaware before Infineon is permitted to amend the Delaware Complaint.

# IV. Legal Standard

Rule 15(a)(2) of the Federal Rules of Civil Procedure provides that on a motion to amend a pleading, a court "should freely give leave when justice so requires." "The Third Circuit has adopted a liberal approach to the amendment of pleadings to ensure that a particular claim will be decided on the merits rather than on technicalities." *Abbott Labs. v. Johnson & Johnson, Inc.*, 524 F. Supp. 2d 553, 557 (D. Del. 2007) (internal quotation marks omitted). A court should not, however, permit amendment in the presence of "undue delay, bad faith or dilatory motive on the part of the movant, . . . undue prejudice to the opposing party . . . , [or] futility of amendment." *Foman v. Davis*, 371 U.S. 178, 182 (1962); *see also CCPI Inc. v. Am. Premier, Inc.*, 967 F. Supp. 813, 815 (D. Del. 1997).

## V. Discussion

Fairchild's opposition to Infineon's Motion to Amend implicates three of the factors weighing against permitting amendments: undue delay, bad faith, and prejudice. (D.I. 21 at 8-12) With respect to undue delay, Fairchild points to the three months that elapsed between Fairchild's filing of the Maine Action and Infineon's filing of its Motion to Amend. (D.I. 21 at

8) Three months, however, is generally not considered a delay that warrants denial of leave to amend a complaint. *See Arthur v. Maersk, Inc.*, 434 F.3d 196, 204 (3d Cir. 2006) (noting that "only one appellate court uncovered in our research has approved of denial of leave to amend based on a delay of less than one year," and allowing amendment of complaint eleven months after commencement of action). The delay here was not undue.

Regarding bad faith, Fairchild paints Infineon's filing of its Motion to Amend here before filing a motion to transfer the Maine Action as a bad faith attempt to prevent a full consideration of Fairchild's "substantial reasons for filing there." (D.I. 21 at 9) The Court rejects this argument. This Court is as capable of evaluating the parties' positions as is the Maine Court. Furthermore, Fairchild has now had an opportunity to present its contentions to Judge Hornby.

This leaves the prejudice factor. In the Third Circuit, "[t]he non-moving party has the burden of proving that actual prejudice will result from amendment of the complaint." *Clark v. Williams*, 2008 WL 1803648, at \*1 (D. Del. Apr. 18, 2008) (internal quotation marks omitted); *see also Bechtel v. Robinson*, 886 F.2d 644, 652 (3d Cir. 1989). The prejudice factor "requires [the Court to] focus on the hardship to the defendants if the amendment were permitted." *Cureton v. NCAA*, 252 F.3d 267, 273 (3d Cir. 2001) (internal citation and quotation marks omitted). A party suffers undue prejudice if the proposed amendment causes surprise, results in additional discovery, or adds costs to the litigation in defending against the new facts or theories alleged. *See id.* 

Fairchild maintains that it would be unfairly prejudiced by Infineon's proposed amendments because they are merely a device to "pressure[] the Maine court to stay, dismiss, or transfer" the Maine Action, which would result in Fairchild being "stripped of its choice of forum." (D.I. 21 at 11) Assuming, *arguendo*, that this was Infineon's intent, the way the cases have played out demonstrate that there has been no rush to judgment. Judge Hornby heard

Fairchild's concerns and reached his decision independently of the instant motion's outcome, but with an understanding that this Court might still rule in Infineon's favor. Transcript of Oral Argument at 44 ("I'm not in any way suggesting to the Delaware judge which way he or she should come out. That's a separate question for them. . . ."). This Court has considered Fairchild's concerns as well.

Fairchild also contends that adding two more patents to the eleven patents already at issue in the Delaware Action would unduly complicate this case. (D.I. 21 at 11) Yet Fairchild's own proposal of simultaneously litigating the two cases five hundred miles apart, potentially requiring the services of two juries and at least two judges, as well as two rounds of discovery, two sets of claim construction briefs, two *Markman* hearings, two summary judgment motions, and the like, seems far more complicated.

Further, Fairchild argues that granting Infineon's motion would "permanently wedge open the doors of the Delaware Court so that any future disputed patents between Fairchild and Infineon – that relate in any way to power MOSFET technology – would have to be litigated in Delaware." (D.I. 21 at 11) Fairchild draws too broad a conclusion. For one thing, once the instant case is completed, there will be no ongoing case in this District to which to add additional disputes. Moreover, subsequent motions for leave to amend can be judged on their own merits. The Court will not deny a proper motion to amend simply due to a concern that it might encourage an improper motion to amend at some later date.

Fairchild also claims it would be prejudiced by the proposed amendments because it would lose the benefit of the Maine district court's relative speed in moving cases to trial. (D.I. 21 at 6, 9) In rejecting this articulation of prejudice, it is enough to say that the Delaware Action has already progressed to the discovery stage, whereas jurisdictional questions are still being addressed in the Maine Action. It is at least possible, if not likely, that the parties' disputes may

be resolved more efficiently in one action in Delaware than in piecemeal actions in Delaware and Maine.

Fairchild's final effort to show prejudice is to assert that bringing the Maine Patents into the Delaware Action would violate the first-to-file rule, because the Maine Patents present different issues than the Delaware Patents. The first-to-file rule dictates that "[i]n all cases of federal competent jurisdiction, the court which first has possession of the subject must decide it." *E.E.O.C. v. University of Pennsylvania*, 850 F.2d 969, 970 (3d Cir.1988) (internal quotation marks omitted). Here, the Court concludes that the District of Delaware first had possession of a dispute that is broad enough to include Fairchild's contentions regarding the Maine Patents.

Infineon's claim that the Delaware Patents and the Maine Patents accuse the same Infine OptiMOS3 product is not undermined by anything in Fairchild's opposition brief. Fairchild has yet to identify any Infineon products not already in the Delaware Action that it believes infringe the Maine Patents. Likewise, although Fairchild states repeatedly in its opposition brief that the "technical, claim construction, and infringement issues" are "different" between the two sets of patents, it has not explained to the Court how those issues are different. (See D.I. 21 at 3, 4, 7, 11, 14, 16) By contrast, Infineon's submission – even without the benefit of an expert declaration – clearly identified multiple points of commonality among the patents' subject matter, including common structural elements such as trenches, terminals, and doped regions to create terminals, and common engineering problems such as the goal of achieving "low Rds<sub>on</sub> resistance" and improving the "avalanche breakdown" or "breakdown voltage" of a power MOSFET. (D.I. 29 at 13-16) While the Court does not "pretend to have a grasp of the science of semiconductor fabrication" at this early stage of the proceeding, Intel Corp. v. AmberWave Sys. Corp., 233 F.R.D. 416, 417 (D. Del. 2005), it is apparent from the parties' submissions that, absent amendment here, the same fundamental issues regarding power

MOSFETs will have to be taught to a judge and jury in both the Delaware and Maine Actions.

This conclusion is bolstered by the fact that all of the claim terms Infineon suggests will need construction in the Delaware Action appear in the Maine Patents,<sup>2</sup> and thus the Court will need to be educated on those terms in any event.

While Fairchild correctly states that the standard in this Circuit for determining whether two suits are one for purposes of the first-filed rule is whether they involve the same facts or issues,<sup>3</sup> none of the cases it cites demand a result contrary to today's decision. (D.I. 21 at 13) *APV North America, Inc. v. Sig Simonazzi North America, Inc.*, 295 F. Supp. 2d 393, 397 (D. Del. 2002), involved two patents from different suits that related to baking equipment, one directed to the entire structure of a bakery conveyor and the other directed to the magnetic grids used to hold the baking pans on the conveyor. Because the two patents in that case involved different technologies, they were considered too unrelated to trigger the first-filed rule. *Id.* Here, by contrast, both the Maine and Delaware patents concern a particular type of field effect transistor, the power MOSFET. *Abbott Laboratories*, 524 F. Supp. 2d at 557-58, does not help Fairchild either because the patents involved there, while inextricably intertwined, did not trigger

<sup>&</sup>lt;sup>2</sup> Infineon predicts that the terms "dopants," "conductivity type," "trench," "source," "gate," "junction," and "breakdown" will need construction in the Delaware Action. (D.I. 29 at 16) These terms also appear in the Maine Patents. For example, the '481 Patent's abstract describes a "trenched field effect transistor," which includes "a doped n+ substrate (drain layer) 22, a more lightly doped – epitaxial layer 24, and a gate electrode 28," and is designed to improve "avalanche breakdown." (D.I. 29 at 13-15, citing '481 Maine Patent at Abstract; 4:55-58; and D.I. 21 at 7) (emphases added) The '943 Maine Patent describes a semiconductor device formed via a "plurality of trenches" in a silicon layer, in combination with "[s]ource regions 116 flank[ing] each side of trenches 111," and a "[d]ielectric layer 120 [that] insulates gates 120 from overlying metal later 126." (D.I. 29 at 13-15, citing '943 Maine Patent and Abstract; 1:24-27) (emphases added) The '943 Maine Patent also states that the "[electrical] current capability of MOSFET 100 . . . is a function of the drain to source resistance." (D.I. 29 at 15, citing '943 Maine Patent at 1:30-36) (emphasis added)

<sup>&</sup>lt;sup>3</sup> Concerning Fairchild's argument regarding the level of similarity required to satisfy the first-to-file rule in this Circuit, the Court concludes, as Judge Jordan did in the *Intel* case, that "the technology is closely enough related." 233 F.R.D. at 418.

the first-filed rule because one of them had not yet issued at the time the purportedly first-filed case was commenced.

Finally, even were the Delaware Action not viewed as the first-filed action with respect to the Maine Patents, amendment would still be appropriate due to an overall assessment of convenience. A district court should not always decide the proper forum based on "any categorical rules," but instead should consider the convenience factors found in 28 U.S.C. § 1404(a). *See Micron Tech., Inc. v. MOSAID Techs., Inc.*, 518 F.3d 897, 904-05 (Fed. Cir. 2008) (allowing effective consolidation of two actions involving some overlapping patents and defendants and noting that first-filed rule should not be automatically applied because "the trial court weighing jurisdiction additionally must consider the real underlying dispute: the convenience and suitability of competing forums"); *see also Jumara v. State Farm Ins. Co.*, 55 F.3d 873, 879-80 (3d Cir. 1995) (listing twelve non-exclusive factors to consider when evaluating motion to transfer).<sup>4</sup>

While Fairchild is headquartered in Maine, it is incorporated in Delaware and has litigated many patent cases here. The Maine Action is less developed than this one, and Judge Hornby's experience with semiconductor technology does not moot the fact that a judge and jury will still have to learn about power MOSFETs in the Delaware Action. Documents located in Maine can be easily produced electronically to counsel in Delaware (and may already be requested in the Delaware Action), and whatever has already been produced regarding jurisdictional discovery in Maine has been done pursuant to this case's own Protective Order. See Fairchild Semiconductor Corp v. Infineon Tech. AG, 2:08-cv00411(DBH), Docket No. 52

<sup>&</sup>lt;sup>4</sup> With respect to Fairchild's argument that Infineon's Motion to Amend is really a motion to transfer venue in disguise (D.I. 21 at 10 n.7), the Court has considered all the relevant factors under that standard as well, and finds that Infineon's submissions meet the burden to show that Delaware is the more convenient forum.

(D. Me. Sept. 21, 2009). Because Maine may not have jurisdiction over Infineon, and Fairchild has already conceded this District's jurisdiction over it, Delaware may be the only available forum anyway. In sum, the Court is convinced that Delaware is the more convenient forum for litigating the Maine Patents and is unpersuaded by Fairchild's assertions of prejudice.

# VI. Conclusion

For the foregoing reasons, Infineon's Motion to Amend the Delaware Complaint to include the Maine Patents is GRANTED. Fairchild's request for costs and fees associated with litigating the Motion to Amend is denied.

Dated: September 30, 2009

Leonard P. Stark

United States Magistrate Judge